

**4715.2710 SIZE OF BUILDING STORM DRAINS AND LEADERS.**

Subpart 1. **Size of building storm drain.** The size of the building storm drain or any of its horizontal branches having a slope of one-half inch or less per foot, shall be based upon the maximum projected roof or paved area to be handled according to subpart 4.

Subp. 2. **Size of vertical leaders.** Vertical leaders shall be sized on the maximum projected roof area, according to subpart 5.

Subp. 3. **Reduction in size prohibited.** Storm drain piping shall not reduce in size in the direction of flow, including changes in direction from horizontal to vertical.

Subp. 4. **Size of horizontal storm drains.**

Diameter of Drain Inches	Maximum Projected Roof Area for Drains of Various Slopes		
	1/8 in. Slope	1/4 in. Slope	1/2 in. Slope
	Square Feet	Square Feet	Square Feet
3	822	1,160	1,644
4	1,880	2,650	3,760
5	3,340	4,720	6,680
6	5,350	7,550	10,700
8	11,500	16,300	23,000
10	20,700	29,200	41,400
12	33,300	47,000	66,600
15	59,500	84,000	119,000

Use a rate of rainfall of four inches per hour for sizes not listed in this table.

Subp. 5. **Size of vertical leaders.**

Size of Leader or Conductor Inches	Maximum Projected Roof Area Square Feet
2	720
2-1/2	1,300
3	2,200
4	4,600
5	8,650

6	13,500
8	29,000

Use a rate of rainfall of four inches per hour for sizes not listed in this table.

The equivalent diameter of square or rectangular leader may be taken as the diameter of that circle which may be inscribed within the cross-sectional area of the leader.

Subp. 6. **Values for continuous flow.** If there is a continuous or semicontinuous discharge into the building storm drain or building storm sewer, as from a pump, ejector, or similar device, each gallon per minute of the discharge must be computed as being equivalent to 24 square feet of roof area, based upon a four-inch rainfall.

**Statutory Authority:** *MS s 16B.59 to 16B.75; 326.37 to 326.45; 326B.101 to 326B.194; 326B.43 to 326B.49*

**History:** *23 SR 686; L 2007 c 140 art 4 s 61; art 6 s 15; art 13 s 4; L 2008 c 337 s 64; 33 SR 2042*

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